



U.S.  
Pat.  
Address



APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR
08/973,305	04/09/99	LEIJON

MM42/1117

JOHN P. DELUCA  
WATSON COLE GRINDLE WATSON  
1400 K STREET NW  
SUITE 1000  
WASHINGTON DC 20005-2477

DEPARTMENT OF COMMERCE

TRADEMARKS

EXAMINER NO.
246

ENAD. E

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 11/17/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
08/973,305

Applicant(s)  
Leijon et al.

Examiner  
Enad, Elvin

Group Art Unit  
2834



☒ Responsive to communication(s) filed on Apr 9, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-47 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-47 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2834

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed November 28, 1997, fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Drawings***

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Moreover, the specification is objected to since it fails to describe figure 6. Correction is required.

### ***Claim Rejections - 35 USC § 112***

4. Claims 1,6,8 and 42-44 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2834

In claim 1, line 1, the phrase "...intended to be directly connected to a..." is unclear and does not constitute a positive limitation.

In regard to claims 2,3 and 6, the use of the term "substantially" is indefinite since there is no means provided to determine how much the potential of the semiconducting layer in relation to the conductor or the coefficient of thermal expansion of the solid insulation would be in order to be "substantially the same". In addition, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

In regard to claim 8, the limitation pertaining to "the whole connecting surface" is lacking proper antecedent basis.

In regard to claims 42-44, the claims are indefinite since they fail to describe the means to perform the respective functions.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1,9 and 35-38 are rejected under 35 U.S.C. § 102(b) as being fully anticipated by Elton et al. (USP 5,036,165).

Art Unit: 2834

Elton et al. disclose an electrical cable provided with an internal grading layer of semi-conducting pyrolyzed glass fiber layer in electrical contact with a cable conductor. In an alternate embodiment, Elton et al. disclose an electrical cable provided with an exterior layer of internal grading layer of semi-conducting pyrolyzed glass fiber layer in contact with an exterior cable insulator having a predetermined reference potential. Furthermore, note that Elton et al. teach that it is known to provide a semiconducting layer in the insulation of a conductor and to connect that layer to a fixed potential in order to provide an equipotential surface on the conductor preventing corona discharge around the conductors.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-8,10-34 and 39-47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Elton et al. (USP 5,036,165) in view of Takaoka et al. (USP 5,094,703).

Elton et al. disclose the claimed invention except for a teaching of having the generator with windings comprising a plurality of insulated conductive elements and an at least one uninsulated conductive elements.

Art Unit: 2834

Takaoka et al., as seen in figures 7,8,10 and 11 teach having a stranded conductor for an electrical cable comprising a combination of uninsulated stranded conductor and an insulated stranded conductor.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the windings of Elton et al. comprised of insulated and uninsulated electrical conductor strands as taught by Takaoka et al. since such a modification according to Takaoka et al. would reduce the amount of insulation needed and the number of electrical connections required in the end windings.

9. In regard to forming the semiconducting layer with the same coefficient of thermal expansion as that of the insulation layer, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed these layers with similar coefficients since it was known in the art that the expansion rate of the two layers would be the same and this is desirable in order to prevent cracking of the insulation and wear between the two.

10. Claims 14,17,20,23,24 and 28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Elton et al. (USP 5,036,165) and further in view Lauw (USP 4,982,147).

Elton et al. disclose the claimed invention except for a teaching of having or not having a step-up transformer in the system device.

Art Unit: 2834

Lauw in column 6, lines 50-52 teach that use of transformers to step-up or step down the voltage are contingent upon the requirement of the application. In this instant application, having the operating voltages in the range higher than 30kV-36kV, it would have been an obvious matter of design choice to one having ordinary skill in the art to utilize a step-up transformer in order to increase and meet the required voltage in the application.

11. In regard to the various types of grounding methodologies to be used with the system, as recited in claims 12,13,15,16,18,19,21,22,26-28, the choice of the particular configuration would have been an obvious matter of design choice, the selection contingent upon the requirements of the application. For instance, parameters such as high resistance grounding, resonant or inductive grounding are commonly known alternatives. Examples of commonly known grounding techniques are described in IEEE C62.92-1989, IEEE Guide for the Application Of Neutral Grounding in Electrical Systems, Part II. (IEEE, New York, USA, September 1989).

### *Conclusion*

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

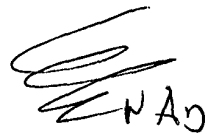
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elvin Enad whose telephone number is (703) 308-7619.

Application/Control Number: 08/973,305

Page 7

Art Unit: 2834

14. . Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-1782. The fax phone number for this Group is (703) 305-3431 (32).



Elvin Enad  
Primary Examiner  
Art Unit 2834  
11.10.99